

**RCMA-B22-D125-1.5**

**Weidmüller Interface GmbH & Co. KG**  
 Klingenbergstraße 26  
 D-32758 Detmold  
 Germany

www.weidmueller.com



**Rogowski coil**

A Rogowski coil is a closed air coil without a ferromagnetic core used for floating potential measurement of AC and pulse currents. Measurement with the Rogowski coil is used widely in technology, as it can be retroactively integrated without separating the primary electric circuit in existing systems. Because this method shows no saturation effect, even the smallest currents and high-frequency harmonics can be measured without loss of accuracy.

**General ordering data**

|            |  |
|------------|--|
| Version    | Rogowski coil, Diameter: 125 mm, Cable length: 1.5 m, 100...5000 A, Output : mV signal |
| Order No.  | <a href="#">2593380000</a>   |
| Type       | RCMA-B22-D125-1.5  |
| GTIN (EAN) | 4050118647808  |
| Qty.       | 1 stuk(s)  |

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Katalogstand 13.01.2024 / Technische Änderungen vorbehalten

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## Technische Daten

### Dimensions and weights

|          |        |            |       |
|----------|--------|------------|-------|
| Diameter | 125 mm | Net weight | 130 g |
|----------|--------|------------|-------|

### Temperatures

|                                   |                           |                       |                |
|-----------------------------------|---------------------------|-----------------------|----------------|
| Storage temperature               | -40 °C...80 °C            | Operating temperature | -40 °C...80 °C |
| Humidity at operating temperature | 5 - 90 %, no condensation |                       |                |

### Dimensions of live conductors

|                       |                          |                 |        |
|-----------------------|--------------------------|-----------------|--------|
| Type of conductor     | Insulated conductor only | Round conductor | 125 mm |
| Installation location | Indoor use               |                 |        |

### Electrical attributes

|                 |            |                               |  |
|-----------------|------------|-------------------------------|--|
| Frequency band  | 50...60 Hz | Nominal turns ratio           | 44,44 kA/V   |
| Phase shift     | 0.004 °    | Primary conductor temperature | 105 °C   |
| Primary current | 5.000 A    | Secondary voltage             | 22,5 mV (@ 50Hz I <sub>primary</sub> = 1 kA), 30 V (max) |
| Tolerance class | 0,5        |                               |  |

### Technical properties

|                 |        |                   |       |
|-----------------|--------|-------------------|-------|
| Cable diameter  | 6.1 mm | Cable length      | 1,5 m |
| Coil resistance | 81 Ω   | Protection degree | IP57  |

### Input

|                            |        |
|----------------------------|--------|
| Outer cable diameter, max. | 125 mm |
|----------------------------|--------|

### General data

|           |                    |  |
|-----------|--------------------|--|
| Linearity | Standard           | IEC 61010-1: 2010, IEC 61869-1: 2007, IEC 61869-2: 2012, IEC 61869-6: 2016, IEC 61869-10: 2017, UL 61010-1 |
|           | no linearity error |  |

### Insulation coordination

|                           |  |                    |                                      |
|---------------------------|--|--------------------|--------------------------------------|
| Impulse withstand voltage | 12.8 kV (1.2/50 ms)  | Insulation voltage | 7.4 kV <sub>RMS</sub> (50 Hz, 1 min) |
| Standard                  | IEC 61010-1: 2010, IEC 61869-1: 2007, IEC 61869-2: 2012, IEC 61869-6: 2016, IEC 61869-10: 2017, UL 61010-1 | Tolerance class    | 0,5                                  |
| Tracking resistance (CTI) | 600  |                    |                                      |

### Classifications

|             |             |             |             |
|-------------|-------------|-------------|-------------|
| ETIM 6.0    | EC002475    | ETIM 7.0    | EC002475    |
| ETIM 8.0    | EC002475    | ETIM 9.0    | EC002475    |
| ECLASS 9.0  | 27-21-01-23 | ECLASS 9.1  | 27-21-01-23 |
| ECLASS 10.0 | 27-21-01-23 | ECLASS 11.0 | 27-21-01-23 |
| ECLASS 12.0 | 27-21-01-23 | ECLASS 13.0 | 27210123    |

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### Important note

#### Product information

The Rogowski coil **RCMA-B22-DXX** is intended for the electronic measurement of alternating current. The Rogowski coil must only be used in conjunction with a Weidmüller transducer RCMC-5000-XX.

#### Functional description

The primary circuit (power circuit) and the secondary circuit (measurement circuit) are galvanically isolated by the Rogowski coil.

As there is no saturation effect, currents can be measured over a wide primary current range without any losses in accuracy.

#### Features

- Conductor diameter of the measuring coil: 6.1 mm
- Housing tabs for attachment with cable ties
- Sealable bayonet fastening

### Approvals

#### Approvals



|                         |            |
|-------------------------|------------|
| ROHS                    | Conform    |
| UL File Number Search   | UL Website |
| Certificate No. (cURus) | E469563    |

### Downloads

|   |   |
|---|---|
| Approval/Certificate/Document of Conformity | <a href="#">Declaration of Conformity</a> |
| User Documentation                          | <a href="#">Instruction sheet</a>         |
| Catalogues                                  | <a href="#">Catalogues in PDF-format</a>  |

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**Zeichnungen**

**Dimensioned drawing**

